# Appendix D—Summary of Interviews with Task Force Members and Stakeholders

# Appendix D—Contents

# M e m o r a n d u m

**TO**: Dave Bradley, Washington State Department of Ecology
Dawn Hooper, Washington State Department of Ecology

**FROM**: Sarah Hubbard-Gray, Hubbard Gray Consulting, Inc.
Elizabeth McManus, Ross and Associates

**DATE**: May 7, 2002

**SUBJECT**: Summary of Interviews with Task Force Members and Stakeholders

---

## Summary of Interview Process and Findings

Over approximately six weeks, the contractor team conducted thirty-three interviews with Area-Wide Soil Contamination Task Force members and other stakeholders. Each interview was approximately one hour in length and covered a number of topics ranging from the interviewee's knowledge of widespread arsenic and lead contamination in soil to the interviewee's thoughts on project outcomes and priorities.

Although each interviewee was unique, there was remarkable commonality across interviews with respect to concerns about widespread arsenic and lead contamination and goals and objectives for the project. In particular, most interviewees expressed concerns about:

- Public health impacts of widespread arsenic and lead contamination, risks to general population and to sensitive subpopulations (especially children) and the ability to adequately understand and manage health risks.
- The ability to develop effective recommendations that can be implemented in a reasonable fashion and the availability of funding for local implementation of recommendations.
- The need for effective, factual communication and public education on issues so that the project does not prompt undue public alarm or outcry.
- The potential that increased knowledge of widespread arsenic and lead contamination could have adverse economic impacts, depress property values or have adverse affects on tourism, people moving to areas, or business development and the need to manage the project in a way that avoids such adverse effects.
- Potential implications for agriculture and sustainability of agriculture market and land values.

Some of the common goals expressed for the Area-Wide Soil Contamination project include:

- Interest in developing recommendations through consensus.
- Establishment of a range of practical solutions.
- Development of recommendations that match solutions to the problem and are implementable, reasonable, and useful.
- Development of recommendations that can be applied statewide, but can be adapted to meet local conditions and needs.
- Protection of land values and agricultural markets.

# M e m o r a n d u m

**TO**: Dave Bradley, Washington State Department of Ecology

**FROM**: Sarah Hubbard-Gray, Hubbard Gray Consulting, Inc.
Elizabeth McManus, Ross and Associates

**DATE**: April 23, 2002

**SUBJECT**: Identification of Key Audiences and Issues from Interviews with Task Force Members and Stakeholders

---

## 1. Introduction

The purpose of this memorandum is to summarize the results of a series of interviews conducted with Area-Wide Soil Contamination Project Task Force members and Stakeholders. These interviews were designed to identify key issues and concerns, levels of interest and experience, information needs, and opportunities for public involvement. The information gathered will be used to:

(1) Refine project direction;

(2) Develop a Task Force work plan; and

(3) Develop a project public involvement plan.

To help accomplish these ends, this memorandum contains a summary of the interview process and interview findings (Section 2), brief descriptions of both the project (Section 3) and the interview methodology (Section 4), and key findings, conclusions, and recommendations gleaned from the interviews organized by topic area (Section 5). Attached appendices provide a listing of those interviewed, the interview questions, and a comprehensive list of findings.

## 2. Summary of Interview Process and Findings

Over approximately six weeks, the contractor team conducted thirty-three interviews with Area-Wide Soil Contamination Task Force members and other stakeholders. Each interview was approximately one hour in length and covered a number of topics ranging from the interviewee's knowledge of widespread arsenic and lead contamination in soil to the interviewee's thoughts on project outcomes and priorities.

Although each interviewee was unique, there was remarkable commonality across interviews with respect to concerns about widespread arsenic and lead contamination and goals and objectives for the project. In particular, most interviewees expressed concerns about:

- Public health impacts of widespread arsenic and lead contamination, risks to general population and to sensitive subpopulations (especially children) and the ability to adequately understand and manage health risks.
- The ability to develop effective recommendations that can be implemented in a reasonable fashion and the availability of funding for local implementation of recommendations.
- The need for effective, factual communication and public education on issues so that the project does not prompt undue public alarm or outcry.
- The potential that increased knowledge of widespread arsenic and lead contamination could have adverse economic impacts, depress property values or have adverse affects on tourism, people

moving to areas, or business development and the need to manage the project in a way that avoids such adverse effects.

- Potential implications for agriculture and sustainability of agriculture market and land values.

Some of the common goals expressed for the Area-Wide Soil Contamination project include:

- Interest in developing recommendations through consensus.
- Establishment of a range of practical solutions.
- Development of recommendations that match solutions to the problem and are implementable, reasonable, and useful.
- Development of recommendations that can be applied statewide, but can be adapted to meet local conditions and needs.
- Protection of land values and agricultural markets.

## 3. Project Background

The Departments of Ecology, Health, and Agriculture and the Office of Community Development have chartered a Task Force to address issues of area-wide soil contamination in Washington. Large areas of soil in Washington are contaminated with low-to-moderate levels of lead and arsenic due to past releases from industrial operations, historical application of pesticides, and other sources. The Area-Wide Soil Contamination Task Force will work with two work groups and a consultant team to develop recommendations for the chartering agencies by June 2003 on a statewide strategy to respond to area-wide soil contamination problems.

The project will:

- Study the nature and geographic extent of area-wide soil contamination in Washington;
- Identify feasible measures to protect human health and the environment; and
- Recommend institutional and regulatory changes to improve how area-wide soil contamination problems are addressed.

During the course of the project, the agencies and the consultant team will also develop and implement a public involvement plan to educate the public and provide opportunities for public participation in the project.

## 4. Interview Process

Interviews were conducted with 17 Task Force members and 16 Stakeholders. The latter were selected to represent a broad cross section of individuals and groups with identifiable interests in the development of a state-wide strategy for addressing area-wide soil contamination. (A complete list of interviewees is included in Appendix A.)

Task Force and Stakeholder interview questions were developed with input from agency personnel and were emailed (along with background information) to interviewees in advance of the scheduled interviews, which were then conducted via telephone. There were 21 questions, with each interview typically requiring between 45 to 75 minutes. (The interview questions are provided in Appendix B.) Most of the interviews were conducted with individuals, although in a few cases more than one interviewee participated.

Interviews were conducted informally, as conversations. In some cases, especially during interviews with Task Force members, the interview was tailored to reflect the interviewee's interest and, while all issue areas were covered, not all questions were specifically asked. Because of this approach, the comprehensive list of Task Force interview responses is organized by issue area rather than by interview question.

All interviews were conducted in January and early February.

## 5. Interview Results

*Overview*

This section summarizes the important findings from the Stakeholder and Task Force interviews. The information is organized according to several key topics, including the subject knowledge and experience of the respondents, key interests, issues and concerns, public involvement, and project process. The findings are discussed in general, with a comprehensive list provided in Appendix C. Lists of interviewees and the interview questions employed in both sets of interviews can be found in Appendixes A and B.

**Subject Knowledge and Experience of Interviewees**

*Understanding of the Project*

- Most interviewed were somewhat familiar with the nature, extent, and distribution of area-wide soil contamination from lead and arsenic in Washington;
- Of those interviewed, there was a fairly even distribution between those that were very familiar, somewhat familiar, and not familiar with the range of protective measures available to address problems of widespread, low-to-moderate level soil contamination, and to reduce exposure prior to implementation of cleanup actions; and
- Of those interviewed, there was a fairly even distribution between those that were very familiar, somewhat familiar, and not familiar with the strengths and weaknesses of current legal and institutional structures.

*Comments/Concerns about Agencies' Approach*

A number of interviewees (especially Task Force members) expressed the belief that the Agencies (especially Ecology) have been doing a good job in dealing with other cleanup issues and projects.

However, a number of concerns were expressed regarding the Agencies' (particularly Ecology's) traditional approach to projects of this sort, including:

- Waiting too long to acknowledge and tackle a problem;
- Being too political about cleanups;
- Spending more money on public relations than on cleanup; and
- Requiring local agencies to take various cleanup steps, but not helping them with resolution of the problem.

These opinions were advanced slightly more by Stakeholders than Task Force members.

A number of comments were made regarding confusion over how much discretion the Agencies have in pursuing remediation in the low-to-moderate contamination areas where the health risks are presumably low. In addition,

concern was raised regarding confusion (and possibly tension) that might exist between Ecology and Agriculture over responsibilities related to the project.

Both Stakeholders and Task Force members had comments relating to the MTCA standards, including:

- Several of the interviewees felt strongly that the MTCA cleanup standards should be reviewed as a part of the project, especially in light of new information that might result from the project;
- Concern that the MTCA cleanup standards are generally confusing and not consistently applied, that they are too low in relation to arsenic cleanup levels, and that they don't adequately take into account naturally occurring background levels;
- Lack of data and understanding of orchard land contamination and applicability of current MTCA standards; and
- Concern that sections in MTCA that make the owners/polluters and producers of pesticides legally and financially responsible have not been addressed.

Finally, concern was expressed about the Agencies' adequately communicating with the public and local agencies. Comments included:

- The contention that Ecology seems to contradict itself by saying there is a problem, but then telling people not to worry about it and not requiring action;
- A desire for more information and education on types of cleanup;
- Agency communication with and education of the public needs improvement because the general public is not aware of the issue, and they don't see lead and arsenic contamination in old orchards as a major concern. If it is a big issue, the agencies need to come up with effective remedial approaches and then inform the public;
- The need to communicate in a way that avoids undue public alarm and concern, especially with respect to ongoing agricultural operations; and
- In the past, local agencies have not been kept in the loop about projects or issues in their communities, learning about them instead from their local newspaper. While this was seen as having improved in the past few years, caution was nevertheless called for.

*Lessons Learned in Dealings with Agencies*

Both Stakeholders and Task Force members articulated a number of lessons they had learned from dealing with the Agencies involved and from other similar kinds of projects. They include:

- Communicate with clear language. Be careful how we portray the issue, so that undue public alarm and concern is not generated (remember the Alar scare and how it was mishandled). It is important to move forward, but we should also be accountable and do community outreach to answer questions and keep the issue from becoming inflamed;
- The nature and extent of the problem should be shared with the public before local agencies are required to implement new land development requirements;
- We should remember that remediation approaches are doable, but they cost money;

- The project should look at "real science and real health affects data." In addition, good risk evaluation information should be provided so the Task Force can make appropriate decisions;

- Some action is better than no action. The Agencies need to expedite the process, use their best professional judgment, and take aggressive risky steps. Don't just study the issue;

- The State has gone too far on some similar issues, which perhaps could be avoided here if the State had more involvement in the remediation costs to help keep the approaches more reasonable and cost effective; and

- Contamination should be removed from areas where people are exposed, especially children.

**Key Interests, Issues, and Concerns**

*Interests and Concerns*

Respondents generally expressed interests and concerns related to the project in four categories: health risks, economic impact, public concern, and costs of and responsibility for cleanup.

- Health Risks This area accounted for the majority of Stakeholder comments and significant input from Task Force members as well. Generally speaking, the concern is to gain a comprehensive understanding of the nature and scope of the problem in order to reduce health risks to children, farm workers, tree fruit growers, and the general population. At the same time, a number of respondents cautioned that premature action designed to reduce health risks before those risks are fully understood might be as detrimental as taking no action. At the same time, some expressed concern that there has not yet been any concrete evidence of real health risks and worry that the response may be out of proportion to the problem;

- Economic Impacts The concerns here had to do with the potential economic impacts of the project on the orchard industry and on the possible future use of orchard land for residential development. Legal and land use issues could cause devaluation of property. At the same time, local governments in Eastern Washington do not want to be stigmatized by the issue (although they do want to be responsive to health risks), which they feel could have negative influence on prospects for economic development and growth. It was expressed that good land use planning expertise is needed on the consultant team or Task Force to ensure that the fine points of land use planning are understood, along with how it could impact community economic viability;

- Public Concern The priority of many respondents is to increase public awareness of the issues involved, but in so doing, to avoid creating "public hysteria" that could produce an overreaction. Several people pointed to the Alar scare as an example of the wrong outcome of the process; and

- Costs of Cleanup. Respondents generally expressed concern over both the potentially high costs of cleanup and who will be responsible for those costs. Of particular concern was making certain that the real risks were significant enough to justify remediation costs. Another concern is that public entities, especially schools, not be treated differently from industry or residential communities.

A recurrent theme related to each of these potential impacts was the belief that it is essential to truly understand the problem, in all its manifestations, before designing and implementing solutions for it. A "scientific" approach to characterizing both the problem and the resultant health risks is critical to resolve doubts about the reality of those risks.

Many respondents also observed that, health risks aside, the fact that large areas of the State had elevated levels of arsenic and lead (i.e., concentrations above the Model Toxics Control Act cleanup standards) raises concerns about

the ability to resolve the liability concerns these elevated concentrations create. Respondents mentioned the potential need for methods and institutions to resolve liability in a way that supports efficient land transfer and maintains property values.

**Technical, Policy or Other Challenges**

A number of challenges were identified, including the importance of gaining a thorough and accurate understanding of the problem, its impacts, and the costs associated with alternative approaches to cleanup; communicating the results in a fair, accurate and measured way to the general public; finding adequate funding to implement cleanup strategies; and avoiding as much as possible negative impacts on growers and their employees, and land owners. Respondents in particular called for crafting a "win-win" situation that is economically feasible and practical. Identifying appropriate land use controls to address the problem was identified as being especially important.

*Common Ground vs. Divergences*

A number of possible conflicts were identified that could negatively impact the project's chances of success. One was considered to be the "predictable" conflict between agriculture and environmentalists: "Agriculture will feel like this is just another thing environmentalists are going after them on to reduce the value of land or make it so it can't be developed." "Environmentalists are going to refer to public health and cleanup levels. The Agriculture side will be focused on the impact to their industry, particularly the economic side." Another comment was that it is "typically easy to get widespread support for protecting children's health, but when economic interests of others are impacted it becomes problematic."

An antidote to this situation is the "need to work with other Stakeholders to gain acceptable alternatives, which should be well researched before making requests or requirements for changes." "Many groups have similar concerns for the safety of families and children, [but] these interests may conflict with those of financial and business interests." As a result, achieving consensus "will be challenging since many people do not think there is a problem because people don't appear sick." Not much consensus currently exists due to "a lack of knowledge and data." At least one respondent believed that "Consensus can be created by sharing information on the issue, developing a plan of action, showing that the issue is taken seriously, and following through with actions."

**Public Involvement**

*Perspectives Missing from the Task Force*

Respondents suggested that several additional perspectives could be useful to the Task Force, including a second elected official, a private sector public health organization, a physician, parents, an environmental engineer, a representative of the pesticide industry, ASARCO, a large landowner such as Weyerhauser or Boeing, risk managers of major businesses, a representative of higher education interests, a second county person from the west side, a farmer that uses chemicals, and possibly more representation from the industry/business side. Stakeholders in particular provided a number of recommendations of individuals who could serve as resources to the project, the names of whom are included in Appendix C.

*Recommendations for Public/Stakeholder Involvement*

Several ideas were offered for enhancing the involvement of the public and Stakeholders, including:

- The public involvement process is a delicate one, so the project should go public in a modest way, with the goal being to educate people without scaring them;
- Press releases, meeting minutes, background information, and other documents should be made available on a regular and ongoing basis;
- A proactive media and outreach strategy should be developed in advance;

- Make certain that information is balanced; and

- Public education is a moving target – you can't develop a message until you know what to say.

**Project Process**

*Key Goals and Challenges*

A number of goals and challenges associated with the project were identified, including:

- The need for regular, consistent, simple and fast communications. The use of various electronic communications approaches (e.g., website, email) were put forth as being especially useful;

- A very open process with maximum opportunities for input into the deliberations of both the work groups and the Task Force; "Use an inclusive process where the group makes the decisions, not from the top down;" and

- Generating solutions that are "reasonable and consistent," "creative," and "workable." This could perhaps be accomplished through the development of a "consensus position on the basic principles of how to address the problem reflecting public health and economic concerns."

*Process Recommendations*

A number of recommendations for addressing these challenges were offered, including:

- A good process has already been set up with consultants and a facilitator;

- Define what each group is doing, what skills and experience are available, and what the coordination process consists of;

- Publish findings and meeting minutes on a regular and consistent basis;

- Need to have risk analysis experts and toxicologists involved;

- Complete communication, keep focus of group on project and deal with facts not perceptions, keep emotional elements out of picture, good to have professional and active facilitator, keep group proactive;

- Develop techniques to keep the environmental sector involved with the work groups as well as the Task Force;

- Keep school districts and other local governments informed;

- Use electronic forms of communication; communicate often and clearly;

- Need clear, attainable goals and to keep focused on them; and

- Clearly define the meaning of consensus (e.g., whether consensus equals unanimity or something else).

*Outside events and Ongoing Projects, Initiatives, or Processes that May Occur Over the Next Eighteen Months*

A number of these were identified, including the 2002 elections, the State's difficult budget situation, the possibility that new technical information could become available, litigation over the problem, and ongoing sampling as a part of studies in Western Washington.

*Research Suggestions*

Both Stakeholders and Task Force members suggested a number of research avenues as well as identifying additional information needs:

- Proceedings of the Sixth International Conference on the "Biogeochemistry of Trace Elements" held in Guelph, Ontario, July 29-August 2, 2001. This document provides highly technical summaries of current research;
- Domy Adriano, "Trace Elements in the Terrestrial Environment" (2001, Springer-Verlag, New York, NY, 680 pp.), which does a good job of integrating the complex and extensive information base on the topic;
- Pacific Rim Enterprise Center report on the cleanup of military sites;
- EPA website, which contains an extensive list of documents;
- Sections of MTCA on owner and producer liability, RCW 70.105 d.040 3© and RCW 70.105 d.040 1(e);
- *Historical information on the manufacturing of chemicals;*
- Fundamentals of public health risks and pathways;
- A discussion of MTCA cleanup standards, along with background information on them; and
- Everett smelter case and court ruling.

## Attachment A.

## List of Interviewees

### Area-Wide Soil Contamination Project Task Force

**Local Government**

Mr. Ray Paolella, City of Yakima
Mr. Randy Phillips, Chelan/Douglas Counties
Mr. Steve Marek, Tacoma/Pierce County
Mr. Paul Roberts, City of Everett

**Elected Officials**

Honorable Ken Stanton, Douglas County Commissioner
Second elected official, to be determined

**Agriculture**

Mr. Jim Hazen, Horticultural Association (declined interview)
Mr. Scott McKinnie, Far West Agribusiness Association
Ms. Laura Mrachek, Cascade Analytical, Inc.

**Environmental**

Mr. Steve Gerritsen, Sierra Club
Mr. Loren Dunn, Riddell Williams

**Business/Development**

Mr. Steven D. Kelley, Windermere Real Estate, Wenatchee
Mr. Craig Trueblood, Preston Gates & Ellis, LLP

**Financial**

Mr. Mike Wearne, Washington Mutual Bank
Mr. Jeff Andrilenas, American International Group (AIG)

**Education/Schools**

Mr. Greg Firn, Vice Superintendent Wenatchee School District
Mr. Mike Bigelow, Office of Schools and Public Instruction
Dr. Frank Peryea, Tree Fruit Research and Extension Center, Washington State University

## Stakeholders

**Terry Austin**, Legal Council, Yakima County

**Dick Anderwald**, Yakima County Planning

**Elise Miller, M.Ed**., Executive Director, Institute for Children's Environmental Health

**Dr. Charles Forster, M.D.**, Family Practice Physician, Yakima Farm Workers Clinic

**Hendrikus Schraven**, Washington Association of Landscape Professionals

**Peter Dervin**, Washington Association of Landscape Professionals

**Kirk Mayer**, President, Columbia Fruit Growers Exchange

**Dan Ballbach**, Martin and Brown (MTCA/Policy)

**Yalonda Sinde**, Executive Director, Coalition for Environmental Justice

**Nathan Graves**, Environmental Engineer, Kennedy/Jenks (MTCA/cleanup profession)

**Tom Martin**, ASARCO Inc.

**Sylvia Kantor**, Metro King County, Citizen (Western Washington)

**Laurie Valeriano**, Washington Toxics Coalition

**John Eberle**, Development Partners

**Rick Gaigner**, Yakima School District

**Dr. Mimi Walker**, Superintendent, Vashon Island School District No. 402

## Attachment B.

## Stakeholder Questions

***Introduction***

As discussed in the project background materials, the Departments of Ecology, Health, and Agriculture and the Office of Community Development have chartered a Task Force to address issues of area-wide soil contamination in Washington. Large areas of soil in Washington are contaminated with low-to-moderate levels of lead and arsenic due to past releases from industrial operations, historical application of pesticides, and other sources. The Area-Wide Soil Contamination Task Force will work with two work groups and a consultant team to develop recommendations for the chartering agencies by June 2003 on a statewide strategy to respond to area-wide soil contamination problems.

The project will study the nature and geographic extent of area-wide soil contamination in Washington, identify feasible measures to protect human health and the environment, and recommend institutional and regulatory changes to improve how area-wide soil contamination problems are addressed. During the course of the project, the agencies and the consultant team will also develop and implement a public involvement plan to educate the public and provide opportunities for public participation in the project.

This interview, and other interviews with Stakeholders and Task Force members, will provide Ecology and the consultant team with valuable insights into the interests, issues, and concerns of constituents for the Area-Wide Soil Contamination Project. The consultant team will summarize the interview responses for Ecology, Agriculture, Health, and Community Development (collectively "the Agencies"), and the Task Force will use this information to refine project direction and to develop a Task Force work plan and a project public involvement plan.

The questions below are meant to provide a framework for your interview; however, the interviews will be conversations between the interviewer and the interviewee, so not all questions may be relevant or important in all interviews. The goal is to ensure that we understand your thoughts, concerns and insights into the area-wide contamination problem. You are not being asked to prepare written responses to the questions and responses will not be attributed to individual interviewees.

**Subject Knowledge and Experience**

1. Have you had a chance to review the background materials that were provided? Before reviewing the background materials, how familiar were you with the issue of area-wide soil contamination from lead and arsenic (very familiar/somewhat familiar/not familiar)?

2. Do you feel you understand what is involved with the project? How familiar are you with the following topics (very familiar/somewhat familiar/not familiar):

> The nature, extent, and distribution of area-wide soil contamination from lead and arsenic in Washington?
>
> The range of protective measures available to address problems of widespread low-to-moderate level soil contamination, and to reduce exposure prior to implementation of cleanup actions?
>
> The strengths and weaknesses of current legal and institutional structures for addressing area-wide soil contamination problems in Washington?

3. Based on your experience, which elements of the Agencies' current approaches to lead and arsenic contamination are working well and which could be improved? What lessons have you learned from your experiences with other cleanup or public health challenges that should be applied to the Area-Wide Soil Contamination Project?

4. Have you had any experience with cleanup or public health initiatives or projects involving methods to reduce exposure to contaminants? What lessons from these experiences should be applied to the Area-Wide Soil Contamination Project?

5. Do you have experience or familiarity with land-use planning and/or institutional control approaches used to reduce or control exposure to contamination that might be relevant to addressing area-wide soil contamination issues?

**Interests, Issues, and Concerns**

6. Do you represent a specific group or groups? What are the primary interests of the group/constituency you are representing?

7. Regarding area-wide soil contamination in Washington, what are the issues and concerns of you and your constituency? Which of those are most important to you?

8. Are there differences of opinion within your constituency with respect to those issues and concerns or their priority? How has your position on these issues and concerns evolved over time?

9. What do you see as the key technical, policy, or other challenges raised by the Area-Wide Soil Contamination Project? What issues, concerns, and perspectives must the Task Force and Agencies address to meet those challenges?

10. How do your interests and concerns relate to the interests and concerns of other Stakeholder groups? What do you perceive as the competing interests/issues relating to the area-wide soil contamination problem? What, if any, degree of consensus do you see currently existing about the problem or how to respond to the problem?

**Project Process**

11. What level and type of involvement would you and your group like to have with the project team during development of the Area-Wide Soil Contamination Project Statewide Strategy? What do you see as your contribution to the project?

12. To make the project most effective, what techniques would you recommend for the communication and coordination process between the Task Force and the work groups, chartering agencies, and consultant team? What techniques would you recommend for communication and coordination with your group?

13. What are the key challenges you see the Agencies facing as they embark on the Area-Wide Soil Contamination Project process? What are your recommendations for meeting these challenges?

**Public Involvement**

14. What type of public education techniques would be most effective for the consultant team to use to get information out to the public and receive input on area-wide soil contamination? What type of information and topics do you feel are most important to reach the public?

15. We would like to identify people in the community who are interested in being involved in the planning process. Do you have any suggestions of who else may want to be involved and/or kept informed?

16. We are planning to develop information and presentations on area-wide contamination that can be shared with and presented to various local community groups and associations. Do you know of any groups/associations/individuals that we can add to our information distribution list?

**Other**

17. Are there approaches or initiatives related to area-wide soil contamination problems in other states or countries that we should research to gain insight into possible options for addressing area-wide soil contamination problems in Washington State? What about other, more general, cleanup or public health related initiatives or processes that might provide insights into options for addressing area-wide soil contamination?

18. Do you foresee any outside events that may occur over the next eighteen months that will have significant influence over the project? How can the Agencies and the Task Force position themselves to be responsive to these outside factors or events? Are there other on-going projects, initiatives, or processes in Washington or other states that should influence the Area-Wide Soil Contamination Project?

19. Do you have any concerns about the Task Force or the Agencies' approach to the Area-Wide Soil Contamination Project in general?

20. What additional advice would you give to the project team?

21. Do you have any other comments you'd like to share?

## Attachment C.

## Stakeholder Responses

***16 Stakeholders interviewed***

**Subject Knowledge and Experience**

1. Have you had a chance to review the background materials that were provided? Before reviewing the background materials, how familiar were you with the issue of area-wide soil contamination from lead and arsenic (very familiar/somewhat familiar/not familiar)?

- *15 Stakeholders reviewed the information provided.*
- *Most interviewed were very familiar or somewhat familiar with the issue.*

2. Do you feel you understand what is involved with the project? How familiar are you with the following topics (very familiar/somewhat familiar/not familiar):

a. The nature, extent, and distribution of area-wide soil contamination from lead and arsenic in Washington?

- **Most interviewed were somewhat familiar.**

b. The range of protective measures available to address problems of widespread low-to-moderate level soil contamination and to reduce exposure prior to implementation of cleanup actions?

- *Of those interviewed, there was a fairly even distribution between those that were very familiar, somewhat familiar, and not familiar.*

c. The strengths and weaknesses of current legal and institutional structures for addressing area-wide soil contamination problems in Washington?

- *Of those interviewed, there was a fairly even distribution between those that were very familiar, somewhat familiar, and not familiar.*

3. Based on your experience, which elements of the Agencies' current approaches to lead and arsenic contamination are working well and which could be improved? What lessons have you learned from your experiences with other cleanup or public health challenges that should be applied to the Area-Wide Soil Contamination Project?

- *Department of Health and Ecology's approach is to wait to know everything before they provide assistance and guidance. They are spending money on public relations rather than providing grant opportunities or funding for those that want to do something now.*
- *Ecology's cleanup levels for arsenic are flawed, they are not based on health risks and are set artificially low. Even though the cleanup standards are supposed to consider background levels, some areas in state have higher levels naturally.*
- *The Task Force process is flawed because the MTCA cleanup standards are not being considered.*

- *Look at Ruston in North Tacoma, where the cleanup standards are set ten-fold higher than the current MTCA standards and combined with a "community protection measures program."*

- *It is a serious error that the Task Force is not going to review MTCA standards as part of the project; they should be looking at the MTCA standards in relation to new information that comes out of this project.*

- *Ecology seems to contradict itself by saying there is a problem, but then telling people not to worry about it and not requiring action.*

- *MTCA Policy Advisory Committee (PAC) felt that missing data and lack of understanding of orchard land contamination was an important issue; concern that the conclusion and recommendations of the PAC have not been addressed until now, five years later; and that many projects have been completed in areas with potential risk since that time.*

- *Challenge is not to create unnecessary concern, need to be careful on how to present information and not unduly alarm the public.*

- *Dealing with wide areas will be harder and could lead to avoidance. Concern that orchard Stakeholders want to ignore the issue due to concern about the implications.*

- *Agencies need to accelerate the process and establish interim actions (i.e., best management practices), and change in the future as new information becomes available.*

- *Current approach appears to be working well since have not seen any epidemic of environmental or health problems.*

- *Agencies are doing is just talking about the problem to deal with this massive lead and arsenic contamination problem, they are not actually doing anything. Ecology has indicated that they don't deal with farmers or issues dealing with land conversions.*

- *ASARCO is responsible for all lead and arsenic contamination, even in Eastern Washington, due to the pesticides being produced with ASARCO waste products.*

- *Agencies have not held ASARCO responsible under the law and required them to do their part in the cleanup – taxpayers should not have to bear the cost.*

- *Agencies have made it difficult for the school district to get the needed permits for major school remodels. There has not been a process identified that the schools should use to evaluate possible contamination and/or address remediation in a reasonable/cost effective manner.*

- *School district learned that it needs to plan for possible lead and arsenic contamination during new school and school remodel projects during their Facilities Plan updates, and involve the Citizen Review Committee.*

- *Agency communication/education of the public needs improvement; the general public is not aware of the issue, and they don't see lead and arsenic contamination in old orchards as a big concern. If it is a big issue, the agencies need to come up with effective remedial approaches and inform the public.*

- *Concern that Ecology will set new requirements for local agencies, but not assist with the resolution of the problem. Currently, Ecology sends letters identifying the concern during permit review process, but does not help to address the problem.*

- *Local farmers who want to retire and sell their land are concerned about this issue and the paranoia that may result.*

- *Soil removal has been required for some projects in some Central Washington areas, but this will not work well for conversions of land to residential use due to high cost.*

- *Agencies have provided adequate notification of similar issues in communities that have worked well; they have included opportunities to ask questions and observe sampling.*

- *Need more information and education on types of cleanup options.*

4. Have you had any experience with cleanup or public health initiatives or projects involving methods to reduce exposure to contaminants? What lessons from these experiences should be applied to the Area-Wide Soil Contamination Project?

- *Communicate with clear language.*

- *Remediation approaches are doable, but they cost money.*

- *It is important to move forward, be accountable, and do community outreach to answer questions and keep the issue from getting inflamed.*

- *Ecology should look at real science and real health effects data.*

- *Some action is better than no action; agencies need to expedite the process, use best professional judgment, take aggressive risky steps. Don't just study the issue.*

- *Provide good risk evaluation information so can make appropriate decisions.*

- *The orchard industry is fragile from an economic standpoint; need to be careful how portray the issue so undue public alarm/concern is not generated (remember Alar scare and how it was miss-handled, don't recreate another scare).*

- *State has gone too far on some similar issues, maybe the State should have more involvement in the remediation costs to help keep the approaches more reasonable and cost effective.*

- *Contamination should be removed from areas where people are exposed, especially children and school / day care areas.*

- *In Yakima projects, "clean" soil has been brought into construction sites that was contaminated and resulted in a higher level of site contamination (need to look at top soil haulers and landscape industry).*

- *Need staff trained in community relations.*

5. Do you have experience or familiarity with land-use planning and/or institutional control approaches used to reduce or control exposure to contamination that might be relevant to addressing area-wide soil contamination issues?

- *Lessons learned include need for community relations, finding funding, being accountable, making it happen, and validating concerns.*

- *Consider deed restrictions, community protection measures/institutional controls, importing clean topsoil to cap contaminants.*

- *Concern is that institutional controls are not well followed up on and controlled over time, but on a widespread project like this they will probably be important.*

- *Putting up fences and signs and telling people that they can't touch the dirt doesn't work well, especially in public areas where people aren't aware of the contamination. Many institutional controls are not fully implemented, are not effective over time, are too difficult to manage, are problematic when there are language barriers, and are difficult to explain to the public.*

- *Local agencies have not focused on contamination issues and not discussed the concern with school district.*

- *Investigate individual sites to identify areas with high concentrations and place impervious surfaces over the problem areas.*

- *Identify institutional controls that focus on at risk populations, i.e., don't allow day cares in areas of concern.*

- *The problem is widespread and public recognition of the issue is very low; most developments in the Yakima area are on old orchard lands.*

- *Process of sub-dividing land could involve testing for lead and arsenic.*

- *The nature and extent of the problem should be shared with the public before local agencies are required to implement new land development requirements.*

- *Lots of emphasis should be placed on public education of the problem (local Yakima agencies have gotten calls from West side newspapers that want to classify all of Yakima Valley as uninhabitable, the extent of the problem does not justify this over reaction).*

- *Educate the public and make sure time is taken to explain land use decision-making process.*

**Interests, Issues, and Concerns**

6. Do you represent a specific group or groups? What are the primary interests of the group/constituency you are representing?

- *Prevent toxic exposure before they cause health problems (including fetal development, rise in asthma, chronic illnesses).*

- *Make sure that children's health risks are considered (currently, it is not known if there is any safe level for lead and maybe for arsenic as well).*

- *Primary interest is to understand risks to farm workers, to know if food grown in yard gardens is safe, if it is safe for kids to play in residential yards, if there is wide spread risk for the general population involving outdoor activities.*

- *Health and safety for children.*

- *Primary interest is that actions taken by agencies correspond to real health risks and use tax dollars wisely.*

- *Primary interest is getting PAC recommendations implemented.*

- *Tree fruit growers and their families are most exposed to lead and arsenic in their day-to-day lives. They are interested in knowing if there is a risk to their families and*

*employees. Also, orchard land is valuable so there needs to be real risk to justify any lost use and/or value.*

- *Washington Toxics Coalition's primary interests are children's health and persistent pollution, so lead and arsenic contamination is of concern.*

- *School community primary interest is the safety of kids and to provide appropriate educational opportunities.*

- *Local government in Eastern Washington does not want to be stigmatized by this issue, but they want to be responsive to real health issues.*

- *Community Coalition for Environmental Justice primary interest is addressing environmental health issues that affect poor communities and communities of color.*

7. Regarding area-wide soil contamination in Washington, what are the issues and concerns of you and your constituency? Which of those are most important to you?

- *Need to consider children's unique risk factors and combination of chronic exposure and multiple/synergistic exposures.*

- *Most important issue is knowing if food grown in yard gardens is safe and what types of exposures present health risks.*

- *Know scope of problem, how to remediate, and how to pay for remediation.*

- *Concern about why this project has been initiated when there has not been any real health risk identified. There is not enough money to respond to and cleanup issues that do not provide real health benefits.*

- *Health issue is most important to orchard industry, but it needs to consider actual health risk. Tree fruit farmers are most heavily exposed and based on the information to date they are not concerned.*

- *Articles in news papers and surveys have not shown different lead levels in children from orchard areas, have not shown health related affects, and have indicated that arsenic and lead stays in the top layer of soil.*

- *Concerns about communication with public and perceptions that could negatively affect orchard industry (i.e., Alar scare in '99 got very bad and out of proportion, parents concerned that apples were poisoning their children even though scientists said they would have to eat hundreds of pounds of apples to be at risk).*

- *Concern that people on Task Force may not have a background that enables them to understand potential impact to orchard industry.*

- *Orchard industry is concerned that cleanup standards not being reevaluated as part of this project; concern that cleanup standards are set without regard to real health risk factors.*

- *Concerned that we don't know the extent of contamination, Ecology needs to do more testing and disclosure of presence and extent of the problem.*

- *Concerned that areas being developed into residential areas, schools, etc., are not addressing lead and arsenic contamination in Eastern Washington.*

- *Communication about the issue needs to be improved and agencies need to treat schools fairly, they should not be required to do things that the residential community is not required to do.*

- *Priority is to increase awareness of issue in Central Washington.*

- *If there are existing health hazards, the issue needs to be addressed from a comprehensive standpoint to make sure that appropriate remedial actions are taken at all sites.*

- *Priority is to have proper portrayal of the problem; do not want public hysteria to be the result of an over reaction.*

- *Public education by the agencies needs to be done if there is a problem, this should be an outcome of this process.*

- *Local government officials feel that this issue could threaten Central Washington communities, they want an approach that considers the project Task Force outcome.*

- *Home builders and the agricultural community are concerned about the project process, outcome, and potential scare tactics; they want to be treated fairly.*

- *Need effective cleanup and hold industry accountable for contamination.*

8. Are there differences of opinion within your constituency with respect to those issues and concerns or their priority? How has your position on these issues and concerns evolved over time?

- *No differences, only different emphasis (i.e., specific diseases, schools, etc.), trying to work with different industry groups (i.e., hospitals IV bags not made with PVC that doesn't leach).*

- *There are different levels of concern about the entire issue.*

- *More studies and available information has reduced the level of concern because they do not show the presence of real health risks.*

- *No differences of opinion within orchard industry, farmers have similar focus, want to deal with "real" problems.*

- *Orchard industry concern has reduced over time due to new information and studies that indicate minimal, if any, health risks and concerns.*

- *Not evolved over time.*

- *Opinions changed with new information and increased awareness levels.*

- *Yakima Health District does not seem as concerned about this issue as Ecology.*

- *Opinions have evolved due to increased information and attention.*

- *Different views between residents that work for industries that create contamination and residents that don't.*

- *Concern increased based on overall community concern.*

9. What do you see as the key technical, policy, or other challenges raised by the Area-Wide Soil Contamination Project? What issues, concerns, and perspectives must the Task Force and Agencies address to meet those challenges?

- *Must hear from other Stakeholders and interest groups that have valid examples and concerns.*
- *Who will pay to remediate public buildings?*
- *Impact in rural areas, farmers, etc.*
- *How can we create a win-win situation?*
- *If residential soil is found to be contaminated and of concern there will be significant financial challenges.*
- *If old orchards cannot be converted to residential property there will be significant concerns from both individuals and organizations.*
- *If contamination and concerns are identified in older housing areas it will be a huge undertaking to address. The public will need to know if they shouldn't be disturbing the top soil and that there is a solution to protect public health.*
- *Some commercial interests may not want to dig too deep to find problem.*

*Suggestions:*

- *The Task Force should address the issue from a public health perspective.*
- *Need good data to show that it is a health issue and justify new requirements and remedial measures.*
- *Not aware of kids in old orchard community with neurological, behavioral, or anemic disorders that are not explained or would raise red flags.*
- *Funding is the biggest issue.*
- *Technical support and advice is needed (often hard to get due to liability).*
- *How much liability should be assigned to ASARCO.*
- *Need sample action plans, sample communication plans, and grant opportunities.*
- *Ecology and Health were not prepared to assist with developing a remediation strategy or follow up on remedial actions taken at public school.*
- *A key technical flaw is the current arsenic cleanup level that is being applied, it is not based on health risks and is not above natural background levels.*
- *Concern is how much money is being spent in light of the cost crunch statewide. Task Force should do a cost benefit analysis to evaluate the real need for the project.*
- *Concern is that Ecology is not looking at agriculture in eastern Pierce County as a possible contributor to the lead and arsenic contamination.*

*Challenges include:*

- *Lack of knowledge about the nature and extent of contamination, bioavailability, and associated health affects.*
- *There will be political obstacles in the process.*
- *Eastern Washington economic impact could be huge.*
- *Task Force needs to have the courage to articulate technical knowledge, implement interim approaches, and fund ongoing research.*
- *Legal and land use issues could cause devaluation of property, need good land use planning expertise on consultant team or Task Force that understands the fine points of land use planning and how it could impact community economic viability.*
- *Need to look at big picture in regard to environmental cleanup options that can transfer problems to another area – need to keep balanced.*
- *Cost and how to implement the measures is a challenge, ASARCO is on the hook, they should be made responsible, the public should not have to pay.*
- *Figuring out how to address the human health impacts where land use conversions have already taken place will be a challenge.*
- *Don't continue to downplay the health problem, tell the public that lead and arsenic represent a health concern. Project background materials don't acknowledge that arsenic and lead pose a significant health risk to children.*
- *Need to find a way to deal with contamination in a way that is feasible economically and practical.*
- *Reaction and required response to the issue needs to relate directly to the public health risk.*
- *Policy challenge will be to identify appropriate land use controls. Need to evaluate impacts of notices on title reports (the financial and real estate sectors have become comfortable with these notices on other projects).*
- *As the public becomes more aware of this issue, agencies will need to look at existing residential development as much as new developments.*
- *There is concern about impact to economic viability of Central Washington, so this project needs to come up with findings to get out of the speculation phase and get into the definition and resolution phase (or dismiss this as an issue of concern).*
- *Challenge will be getting sites cleaned up, due to lack of allocated resources to do the work after the research and studies have been done.*
- *Community health priorities must be addressed while considering the economic and Stakeholder realities.*

10. How do your interests and concerns relate to the interests and concerns of other Stakeholder groups? What do you perceive as the competing interests/issues relating to the area-wide soil contamination problem? What, if any, degree of consensus do you see currently existing about the problem or how to respond to the problem?

- *Typically easy to get widespread support for protecting children's health, but when economic interests of others are impacted it becomes problematic.*

- *Need to work with other Stakeholders to gain acceptable alternatives – research well before making requests or requirements for changes.*
- *Many groups have similar concerns for the safety of families and children; these interests may conflict with those of financial and business interests.*
- *Reaching consensus will be challenging since many people do not think there is a problem because people don't appear sick.*
- *School system interests and concerns are the same as most others, would like to have money to pay outside consultants.*
- *Consensus can be created by sharing information on issue, developing a plan of action, showing that the issue is taken seriously, and following through with actions.*
- *Industry perspective relates to and parallels with developers and businesses; these perspectives do not typically align with Ecology.*
- *All Stakeholder groups are at risk until research has been completed and action taken; need a standardized approach that involves best management practices.*
- *Competing interests involve families living on orchard land who don't know about the issue versus the potential economic impact to the farming area.*
- *Not much consensus because of lack of knowledge and data.*
- *Not aware of Stakeholders that feel new additional protection measures are needed, concerns have diminished after seen results of studies, existing protective measure have worked.*
- *Not see any competing issues/interest at this time, but will see as time goes on and information is disseminated.*
- *Primary concern is to take care of children, others will be concerned with the financial interest and cause the Task Force to fail.*
- *School district issues and concerns are assumed to be similar to others.*
- *Not much consensus now.*
- *There is reasonable consensus within local agencies in Eastern Washington, but not within the general public because there is not enough known and most people do not feel there is a problem.*
- *Task Force should do work that helps define the medical/health basis of the problem, use this information to generate public understanding of the problem.*
- *Concern for community health and economic justice aligns with many other Stakeholder concerns.*
- *Profit interests compete with community health and economic justice.*
- *Do not see consensus.*

**Project Process**

11. What level and type of involvement would you and your group like to have with the project team during development of the Area-Wide Soil Contamination Project Statewide Strategy? What do you see as your contribution to the project?

- *Each Stakeholder indicated the level of involvement they want to have and how much information and they types of meeting notice they would prefer.*

*A variety of suggestions were provided on how they could contribute to the project, including:*

- *Assist by providing input on specific questions and being a resource to other children's health networks.*
- *Provide physicians perspective to analysis and techniques for reducing exposure.*
- *Share how site was remediated and the associated correspondence to help others.*
- *Share information, and participate on a regular basis.*
- *Provide historical perspective and input and review during project.*
- *Distribute information to orchard growers.*
- *Communicate with Task Force members.*
- *Provide input during Stakeholder interview; not be regularly involved, rely on other agencies to be the lead.*
- *Understand and help communicate information back to the local public. Help the Task Force understand historic development patterns in the Yakima area as they may relate to lead and arsenic impacted areas.*
- *Provide an understanding of community and environmental justice concerns.*

12. To make the project most effective, what techniques would you recommend for the communication and coordination process between the Task Force and the work groups, chartering agencies, and consultant team? What techniques would you recommend for communication and coordination with your group?

- *E-mail if kept succinct and without back and forth discussions between recipients.*
- *Task Force and work group members should get their information from the project process.*
- *Take good notes and keep good data.*
- *Define what each group is doing, what skills and experience are available, and define coordination process.*
- *Publish findings, meeting minutes on a regular basis.*
- *Need to have risk analysis experts, toxicologists involved.*
- *Complete communication, keep focus of group on project and deal with facts not perceptions, keep emotional elements out of picture, good to have professional and active facilitator, keep group proactive.*

- *Concerned about effectiveness of Task Force process. Techniques should be established to keep the environmental sector involved in the work groups/subcommittees, not just the Task Force.*

- *Environmental sector should be able to influence the Work Groups, need a process to ensure that the environmental sector is not left out of the process and that they are given adequate attention and resources.*

- *Use concise short documents and techniques to keep school districts informed.*

- *Use electronic forms of communication, communicate often and clearly.*

- *Good process already set up with consultants and facilitator.*

- *Use an inclusive process where the group makes the decisions; not from the top down.*

13. What are the key challenges you see the Agencies facing as they embark on the Area-Wide Soil Contamination Project process? What are your recommendations for meeting these challenges?

- *Communication, be clear on what expectations are, what goals are, and what is expected of everyone.*

- *Understand the difficulty of communication with and between the different agencies. Keep the process as transparent as possible.*

- *Use a professional facilitator.*

- *People will ask about funding, accountability, legal suit against ASARCO, etc.*

- *Dept of Ecology and Health have different approaches and may not be communicating all the time.*

- *Process problem is that there is not a major problem to begin with.*

- *Challenge will be for Task Force to accept new and different views from non-agency sources.*

- *Have the courage to dig in and make recommendations to address potential health risks, even in light of the potential lack of information and inconclusive information.*

- *Challenge is limiting inclusion of risk based evaluation and alternate cleanup standards considerations. Recommend evaluation of cleanup standards relating to this issue be included; get risk evaluators involved.*

- *Cost of remedial actions will be key challenge.*

- *Manage the public perceptions about this issue and avoid the perception that the sky is falling, but get word out.*

**Public Involvement**

14. What type of public education techniques would be most effective for the consultant team to use to get information out to the public and receive input on area-wide soil contamination? What type of information and topics do you feel are most important to reach the public?

*Techniques:*

- *Get out on several levels.*
- *Consider school nurse surveys.*
- *Public service announcements on TV (expensive but reach more people).*
- *Important to hold public hearings (must do!).*
- *Continuing to interview and go back to organizations with new information.*
- *TV with bi-lingual messages.*
- *Radio stations (including Hispanic which is 35% in Yakima area and up to 80% in some communities).*
- *Use schools to disseminate information.*
- *Evening meetings and Saturday forums.*
- *Information in community newsletters.*
- *Keep community councils informed.*
- *Have answers ready so don't create a problem through the communication process. Do not unduly alarm the public prior to understanding the risks, help the public understand the risk.*
- *Keep press releases held to minimum, anticipate possible scares (i.e., eating apples from orchard that has lead and arsenic contamination).*
- *Develop media responses with the help of professionals, concern about unqualified people making inappropriate statements (critical to keep negative/unfounded publicity out of process).*
- *Media needs to be kept abreast of what is happening and invited to appropriate meetings.*
- *Public meetings are important, provide adequate notifications and outreach so they are well attended.*
- *Use web site for all meeting notices, and way for people to get email updates.*
- *Do not instill fear in public that could result in an emotional reaction and over prescribed unneeded requirements to address the issue.*
- *Use public workshops in the highly impacted communities.*
- *Once good baseline information is established, use public service announcements.*
- *Focus group meetings.*
- *Mail and phone surveys.*

*Topics:*

- *Provide information on higher risk of children and other toxics that affect children, get people more aware of children's behaviors and associated vulnerability – start shifting viewpoints now.*

- *Information relating to children (Hispanic families tend to have more children, it will capture their attention).*
- *Risks associated with small children, have existing information available for review.*
- *New data that is newsworthy should be distributed, contact the media regularly.*
- *Develop fair statements that represent the true hazards involved, don't exaggerate.*
- *Extent of problem, where contamination is, risk factors.*
- *Information about what chemicals and what amounts are found, agencies timelines for cleanup, who are the responsible parties, who are all the players and Stakeholders.*

15. We would like to identify people in the community who are interested in being involved in the planning process. Do you have any suggestions of who else may want to be involved and/or kept informed?

*Suggestions included representatives from:*

- *The Washington Toxics Coalition*
- *Coalition for Environmentally Safe Schools, parent/citizen group on Bainbridge Island*
- *People's Environmental Action for Children's Health*
- *U of W Center for Eco Genetics and Environmental Health*

*Out of state:*

- *EPA's "Lead Safe Yards" handbook*
- *Healthy Buildings Network; lots of work on arsenic in pressure treated wood and other building materials*
- *Center for Health Environment and Justice, Creating Safe Learning Environments*
- *Arsenic and lead work that has been done in Maine, includes new legislative bill*
- *Beyond Pesticides, also looking at soil issues*
- *Environmental Working Group, research and reports, in Washington DC, may have done AR and LD work*
- *Yakima Valley Farm Workers Clinic*
- *Vashon Maury Island Community Council*
- *Beachcomber newspaper (Vashon Island)*
- *Heller Ehrman White McAuliffe*
- *ASARCO*
- *Exponent*
- *Local health departments and districts*

- *Local chambers*
- *PAC members and those involved with PAC*
- *Cooperative Extensions*
- *WSU*
- *Planning Department Director for Chelan County*
- *Northwest Horticultural Council in Yakima*
- *Land use attorney*
- *Farm Bureau*
- *School districts*
- *Architects*
- *Educational Service District (ESD105) in Yakima*
- *Central Washington Home Builders*
- *Assoc. General Contractors of Washington*
- *Association of Realtors*
- *Title companies*
- *Terrace Heights Community Council, West Valley Community Council, Buena Community Council in Yakima County*
- *Service clubs*

16. We are planning to develop information and presentations on area-wide contamination that can be shared with and presented to various local community groups and associations. Do you know of any groups/associations/individuals that we can add to our information distribution list?

- *Yakima Valley Farm Workers Clinic*
- *Medical community, use hospitals and their department meetings*
- *Churches would be interested in presentation, i.e., Unitarian Church in Yakima*
- *Yakima Community College interested*
- *School district*
- *Day care providers*
- *Homeowners*
- *Chambers of commerce*
- *Business groups*

- *Tacoma Pierce County Chamber of Commerce*
- *Association of WA Realtors*
- *Citizens for Health Bay (WQ)*
- *City of Tacoma*
- *Pierce County*
- *Potato Commission*
- *Yakima Growers and Shippers (larger growers)*
- *Wenatchee Valley Traffic Assoc. (large growers and packers)*
- *Yakima Hop Growers*
- *United Farm Workers in Sunnyside*
- *Columbia Legal Services*
- *Superintendent of Public Instruction, they have manual for school district that discuss building new and remodeling schools*

**Other**

17. Are there approaches or initiatives related to area-wide soil contamination problems in other states or countries that we should research to gain insight into possible options for addressing area-wide soil contamination problems in Washington State? What about other, more general, cleanup or public health related initiatives or processes that might provide insights into options for addressing area-wide soil contamination?

- *Consider indoor air quality approaches.*
- *Look at Ruston in North Tacoma; Triumph site in Idaho did risk analysis that derived an arsenic level of 117 ppm, or 250 pmm with institutional controls; Globeville in Denver found that the use of herbicides/pesticides in 1950 contributed a lot to the problem.*
- *Look at Best Management Plans and processes that have been used for other types of initiatives.*
- *Look at Michigan, Pennsylvania which were large apple grower states.*
- *Look at other cleanup projects.*
- *Look into campaign called Child Proofing Our Communities, they did a report of schools on superfund sites that have siting criteria, would like the Task Force to review and talk about this report (Creating Safe Learning Zones).*

18. Do you foresee any outside events that may occur over the next eighteen months that will have significant influence over the project? How can the Agencies and the Task Force position themselves to be responsive to these outside factors or events? Are there other on-going projects, initiatives, or processes in Washington or other states that should influence the Area-Wide Soil Contamination Project?

- *This is an election year, and the state is running in a budget deficit; it's possible that this could become political issue.*

- *New technical information may become available.*
- *Economic / cost issue.*
- *Competitiveness Council work could influence the project since it could keep new businesses from coming to WA.*
- *If a plaintiff lawsuit were filed in Eastern Washington it could result in having to handle the issue under crisis, which could result in less than desirable policies and regulations.*
- *Anticipate concerns that come up as information gets out about the project, it may create a sensitive population and cause problems for the orchard industry, be prepared to respond to avoid front page alarmist stories, using word contamination is concern.*
- *Food safety concerns have gone up over the past years, could elevate more.*
- *General concern is that Stakeholder process will drag on with no results, should set solid time lines, stick to them and create solid recommendations.*
- *Unfunded mandates are not acceptable, need money to help school districts address this issue.*
- *Ability to sustain the process economically.*

19. Do you have any concerns about the Task Force or the Agencies' approach to the Area-Wide Soil Contamination Project in general?

- *Approach in Western WA is focusing on tying the liability solely to ASARCO, it should consider broader agricultural impacts.*
- *Project may bankrupt families.*
- *Concern that process will not look at MTCA cleanup standards.*
- *Concern about leaving cleanup standards review out of the project.*
- *Concern that PAC recommendations are not incorporated specifically into this project.*
- *Concern about data collection, data gap identification, need for health affect studies.*
- *Concern that MTCA standard makes people assume that there is a problem when it appears that there are not any immediate health problems, press releases can cause more problems than solve, unless kids are really getting sick.*
- *Concerned about the Task Force process, a better approach would be to meet with individual groups, put out information and get feed back. Too often Stakeholder process focuses on financial issues and not broader public needs.*
- *Appropriate problem definition and public perception are critical.*

20. What additional advice would you give to the project team?

- *Don't let financial interests override public health interests.*
- *Agencies should follow up on remediation activities and provide technical input and conformational soil testing.*

- *Agencies should provide grant writing support.*
- *Provide remediation examples.*
- *Make sure to look beyond the vested interests of the agencies, look at the public's interest.*
- *New requirements need to have a long implementation plan process, schools need time to prepare.*

21. Do you have any other comments you'd like to share?

- *Glad to see the State Legislature appropriate money to this project.*
- *Glad to see identification of Stakeholders and interviews being conducted up front to identify issues, groups, etc. It looks like project is getting off to good start.*
- *Try to stay focused on public health and welfare to keep on track and avoid political issues overtaking.*
- *Appreciate the call to get input early in the process.*

## Policy, Technical, and Process Challenges

*Technical and financial challenge – to what extent go out & sample parcels.*

*Not to fix blame on any one group.*

*To speak with one voice.*

*Educate public.*

*Landowners faced with problems they don't understand.*

*Gain buy-in and trust of those involved, public.*

*Process challenge: dealing with people who are not used to this process.*

*Overcoming ongoing financial consequences.*

*Political will for cleanups?*

*What does the contamination mean & how do we portray that to the public?*

*Characterize the "problem".*

*Figure out how big a problem it is; how much of a real impact.*

*Figure out what to do and how to pay for it.*

*Defining scope and nature of appropriate remediation measures and how to pay for them.*

*What is the risk really – 7 ppm or 70 ppm?*

*With elevated blood lead levels in children, need to know where the contamination is coming from.*

**Outside Events & Processes in the Next 18 Months**

*Budget; dismal state budget projections.*

*Reporters will bring up school issue (school site contaminated in Wenatchee) again.*

*Impeding legal challenges; State supreme court ruling on Everett smelter case.*

*Class action lawsuits.*

*Initiatives, simple majority votes.*

*Mini area-wide study in Pierce County, doing sampling.*

*Are there other sites under investigation?*

*Will any of the major federal environmental laws be going through reauthorization in DC?*

***Interests, Issues, and Concerns***

Main Issues and Concerns

## Economic Impacts

*Depressed property values (fear: properties rendered undevelopable); assets become liabilities.*

*Tourism.*

*People & businesses moving into area.*

*To agriculture, primary employer in E WA.*

*But: labs may get a windfall.*

*When map of contamination drawn, implications for cost & availability of home insurance.*

## Public Health Impacts

*Unknown whether there are chronic health effects (others say there are no acute or chronic health effects that can be tied to lead or arsenic soil contamination).*

*Effects are more likely for sensitive populations, children.*

## Undue Public Alarm/Outcry

*About soil contamination on people's properties, home gardens, school yards.*

*About current agricultural food products; this could become another alar*

## Source of Funding for Solutions

*Who pays for cleanup?*

*Will Ecology implement the recommendations?*

*Be protective, but do no harm.*

*Who funds enforcement?*

*Insurance industry already pays a lot of money for cleanups.*

*Concern that there is a health problem, but we don't know about it.*

*Potential costs imposed on school districts for cleanup and mitigation.*

*Chronic health effects – now seeing them, or should be looking for them.*

*No reason to believe there's an immediate public health concern, but we also don't know if we've looked in the right places yet. We can't say that we're 100% sure that public health is protected, because we don't know.*

*We don't have the depth of data we need to characterize the health issues. We don't have the money to get that depth of knowledge, so must rely on indicator studies.*

*Disclosure issue for future buyers. Have cases where developer wants to develop those orchards into a subdivision and sell them to homebuyers. Need disclosure to allow that person to assess their risk.*

**Comments/Concerns About the Agencies' Approach**

*Ecology did well on Wenatchee school issue – answered questions right away.*

*MTCA – not clear, confusing.*

*MTCA not consistently applied.*

*Agencies have been cooperative.*

*Positive about approach.*

*Ecology trying to do best they can with this project.*

*Ecology tends to wait until someone brings them a problem; very political about cleanup.*

*Unclear who's responsible for monitoring, maintaining.*

*Confusion between Ecology and Agriculture in terms of responsibilities; tension between Ecol. & Ag.*

*In past, local agencies not kept in the loop about projects or issues in their communities – learned about things from newspaper; has been better in the past few years.*

*Ecology hasn't done anything about the sections in MTCA that make the owners/polluters and producers of pesticides legally and financially responsible.*

*Unclear how much discretion Ecology has and what basis it may choose to use that discretion in areas of low-level contamination, where health risk extremely low.*

*At West-side smelter sites, haven't done a good job of identifying the real risk.*

*Problems with dealing with this as a MTCA cleanup, when it isn't.*

*Working relatively well at sites with a single owner who has been there a long time and plans to be there a long time.*

**Lessons Learned in Dealings with Agencies**

*Equal application of law (MTCA) to all projects.*

*Reason-specific recommendations (e.g., lower rainfall).*

*Include economic considerations in decisions.*

*Open lines of communication between state and local agencies.*

**Common Ground vs. Divergence**

*Not sure whether views of health directors might be in opposition to what local governments will think.*

*Ag will feel like this is just another thing environmentalists are going after them on – to reduce the value of land or make it so it can't be developed.*

*Likely to be pretty predictable. Environmentalists are going to refer to public health and cleanup levels. Ag side will be focused on the impact to their industry, particularly economic side.*

*I think the agricultural side will want to promote planting grass, so that the grass would uptake the contaminants, then moving the grass. Whereas I think the environmentalists would say remove all the soil.*

*Everyone will recognize we have a problem.*

*The fact that there's a Task Force = recognition of problem.*

*the fact that above MTCA standards not enough to make it a problem.*

*Come to agreement on characterizing the problem (low-level) and some agreement on steps to take (e.g., low-cost institutional steps).*

*Unlikely to come to agreement on scope of problem and remedies.*

*Don't know if there's a problem.*

*Objection to pre-defining this as a problem; implies that we have to deal with it, do something.*

*TF debate on how clean is clean*

*Divergence on things that are not on the table – the necessity for remediation in particular.*

*Hope there is consensus on the need for reasonable solution; that the solution is not to dig up 2 feet of soil.*

*It will be difficult to identify what we are really trying to solve; people will have different ideas.*

*Hope there is consensus that there are sites out there where there is no problem.*

**Interests Represented**

*Environmental health directors*

*Growers*

*Business owners*

*City of Yakima*

*Washington Cities*

*Public schools*

*Real estate Stakeholders: brokers, agents, present sellers and future buyers*

*WSU Tree Fruit Extension*

*Tree fruit growers*

*Homeowners with lead/arsenic in soils*

*Scientists*

*Developers, builders*

*County planners*

*Sierra Club*

*Environmental community*

*AIG, American International Group*

*Financial institutions*

*Office of Schools and Public Instruction*

*West-side health directors*

*Lending fraternity for agricultural development, commercial and residential development*

*Washington Environmental Council*

*City of Everett*

*Far West Agribusiness Association*

*Input side of agriculture/food production*

*People that own or are looking to sell contaminated properties*

**Perspectives Missing from Task Force**

*Second elected official*

*Private sector public health organization*

*Physician*

*Parents*

*Environmental engineer*

*Pesticide industry*

*ASARCO*

*Large landowner such as Weyerhauser or Boeing*

*Risk managers of major businesses in Washington*

*Someone representing higher education interests.*

*A second county person from West side would be good*

*Farm side that uses chemicals*

*Not sure whether industrial/business side represented well enough*

### *Project Process*

**Goals**

*Find out directly what concerns and issues are to be able to share information with group.*

*Need to have priorities commensurate with public health risk.*

*Task Force members are willing to listen before becoming entrenched in view.*

*Come up with a workable solution.*

*Establish a consistent mitigation matrix that is site and context specific.*

*Reasonable and consistent solutions.*

*Consensus position on the basic principles of how to address the problem that reflect public health and economic concerns.*

*Identify what the real issues are and what we can do about them.*

*Meet objectives of Task Force; accomplish intent of Task Force.*

*At the end, have a reasonable set of guidelines and solutions; be practical.*

*Recommendations that are applicable across the state and implementable.*

*Make sure product is useful and can be adopted at the state and local level.*

*Resolve some of the unknowns about the issues, impacts, and repercussions.*

*Come to consensus on what the actual issue is, the severity of the problem, and rational ways to mitigate it.*

*Economic and practical recommendations.*

*If the TF identifies this as a serious problem, will need concrete justification as to why.*

*Cleanup plan that is realistic, gets implemented soon, with aggressive cleanup standards, and gets funded adequately.*

*Reasonable and pro-active ways to address.*

*Address the real problem.*

*Learn enough to be able to contribute.*

*Communicate with constituency.*

*Represent their concerns.*

*Setting and meeting goals.*

*Document that is usable and use.*

*Recommendations on new regulations and how to pay for it.*

*Do a good job.*

*Move problems that have been languishing toward resolution.*

*Craft institutional controls, best management practices that communities could use.*

*Identify what the real contamination risk is.*

*Where there is contamination, determine how we can effectively choose and implement measures to ensure that the necessary cleanup is achieved.*

*Determine the management practices for individuals to use to reduce exposure.*

*Define what the real problem is (what the data tell us, not what we perceive) and create a solution that matches the problem.*

*Be creative about the solutions.*

*Identify what the Task Force can agree on and what issues are best left to another forum.*

*Clear, predictable, and timely decisions (identify where a problem and where not; when there's a problem, identify what's expected of the players and when).*

*Rules that are readable, easy to understand, and internally consistent.*

*Need practical solutions that recognize the goals and capabilities of residential/commercial developers and businesses.*

*Don't want to increase the burden of local governments too much.*

**Process Concerns**

*That there's a real role for the Task Force, not just rubber stamp.*

*If there's a foregone conclusion (already have solution), hope that's brought out right up front.*

*Do all this work, then ignored.*

*Feel comfortable that process fair and open.*

*Schedule, advance warning about meetings.*

*Wondering how to solve this without discussing/evaluating cleanup levels.*

**Process Recommendations**

Spokesman, updates.

E-mail.

*Schedule meetings far in advance.*

*Alternates necessary.*

*Establish clear expectations.*

*Provide timely feedback; make sure feedback is succinct, effective, and efficient.*

*Be fair, understanding.*

*It is going to take a lot of compromise. No one will come out with exactly what they want.*

*Be practical.*

*Stay focused on goal, objectives.*

*Keep eyes open, make choice; balance.*

*Charette to get people on the same page, define some neutral ground.*

*Written materials that have summaries or are to the point.*

*Basic information and knowledge of the issues, and what common ground is, if known.*

*Open lines of communication between state & local agencies, be up front.*

*Need neutral facilitator to keep process on track.*

*Need clear, attainable goals; keep focused on them.*

*If there's a foregone conclusion, if already have the solution, hope that's brought out in front.*

*Don't waste time, meeting to death.*

*Best processes are those where participants are willing to listen and compromise to get to consensus.*

*Facilitators shouldn't try to sweep issues off the table too soon, or push the group to consensus too soon.*

*Tenacity and creativity to work things out.*

*It would be good to identify issues with the regulatory framework, even if the Task Force can't address them.*

*Need to meet on the East Side, have people see where the problem is; take a little tour.*

*Brief the Task Force soon on the ruling coming on the Everett smelter case.*

*Well managed facilitation.*
*Come to terms with what mission is, what is do-able, and try to get buy in.*

*Clearly define the meaning of consensus (e.g., whether consensus = unanimity).*

*Ensure support for direction and end product.*

*Clearly identify a spokesperson from each work group; use ongoing progress reports to Task Force.*

*Convey information to Task Force in a clear, crisp, and concise way.*

*Try to not let the Task Force get bogged down in too many issues/details.*

*Need to have reasons to be at each meeting.*

*Don't saddle the Task Force with too much paper that we end up losing ourselves.*

*Need to be careful with how we posture this to the community. Four agencies and consultant team need to make a statement that there is not an issue with food products that are grown now. (So there's no leap from arsenic in soil to apples in grocery store.)*

*Recognize people's stewardship over the land.*

*Allow subgroups to come up with suggested regulatory language.*

*The Task Force needs to set some direction and not get bogged down in detail.*

*Need to break into smaller groups sometimes; the Agencies need to let that happen.*

*Need to be careful since this has the potential for a lot broader applications*

**Briefings or Requests for More Information**

Historical information on the manufacturing of chemicals would be useful.

Fundamentals of public health risks & pathways--how significant is the risk?

*Discuss MTCA cleanup standards, background info on them.*

*Feel in over head on science.*

*Basic knowledge and some knowledge on issues; all know what terms mean.*

*Everett smelter case, court ruling*

### *Public Involvement*

*When this gets started, people will have a lot of personal concerns with their own properties, kids going to school yards, etc. Will be hit hard. Already one case where an individual took a sample on a school playground.*

*People will have real-time concerns; pressure for immediate solution.*

**Who to Involve/Educate**

*Horticulture Association*

*Wine/grape association*

*Vegetable growers*

*Planning depts.*

*Health depts.*

*PTSAs & PTAs*

*PUDs, public utilities*

*Master gardeners group*

*Jim McPherson, WA Tree Fruit research commission*

*Builders groups*

*Farm Bureau*

*The Grange*

*WASAC – county planners group*

*RIMS – risk managers of major businesses in WA*

*WASA – WA Association of Schools, Doyle Winter*

*Association of School Directors (Boards), Martha Rowes Laffey*

*Public higher ed*

*Private higher ed – Friends for Higher Education*

*Private K-12 schools*

*WA Association of Cities*

*WA Association of Counties*

*WA Association of Local Public Health Officers, Vicki Kirkpatrick*

*Environmental groups*

*Agricultural industries, orchardists*

*Group on Vashon Island*

*Major communities: Everett, Tacoma, & Central WA*

*Professional organizations, engineering groups*

*Northwest Environmental Business Council, Jerry Dimiro*

*Ports Association, WPPA*

*People for Puget Sound*

*Lands Council, group in E WA that's affiliated with WEC*

*Association of WA Realtors*

**Recommendations for Public Involvement**

*Weigh public demand for news, recommendations; don't rush into things then regret, revise.*

*Delicate process, go public in modest way.*

*Educate people without scaring them.*

*Meeting summaries.*

*Quarterly summaries: accomplishments and what's next.*

*Periodic press releases, perhaps quarterly.*

*Ensure there is always adequate background information; make it sensitive to Ag.*

*Meeting minutes, documents, etc. have to be public.*

*Need media, outreach strategy.*

*Proactive, not reactive; not just sound bite.*

*Establish parameters for communication, so people don't get things with spin.*

*Needs to be balanced.*

*Website.*

*Maybe a newsletter.*

*If there's not a problem, let's not make an issue out of it.*

*Press needs to understand why we're doing what we are.*

*Public education is a moving target – can't develop message until know what to say.*

*Send invitations to meetings and minutes to the extent they're made.*

*Have subcommittees open to non-member participants.*

*Don't let people tie up the Task Force with things that are not within its scope.*

*When people's input would add value, plug that input in (e.g., in WG or TF)*

### *Other*

*Comments on Area-Wide Soil Contamination Problems*

*Children are the most susceptible to public health effects.*

*Haven't seen anything with kids so far.*

*There are cases where blood lead level is high, but mostly in low-income, orchard areas.*

*Where high levels, have gone out and visited areas to look at exposure pathways (e.g., lead-based paint, cultural folk remedies, occupational exposures).*

*Public health exposure is a localized, individual problem, only if contamination is present.*

*There is only a minimal effect on the general public.*

*This is different than other public health issues, because looking at chronic, place-based exposure.*

*Mainly pesticides from the 1950s, but many times they continue to be used after the ban date.*

*Ideas about Solutions to Area-Wide Soil Contamination Problems*

*Such a big area to dig up all the soil;where would it go?*

*Need to determine which areas have contamination, narrow down the possible areas; what is the scope?*

*Seems more appropriate role for planning departments, rather than health departments. Right now community development doesn't work overly well at sharing information with planning.*

*Need to prioritize evaluation towards sensitive populations – schools, etc.*

*Screening people may be necessary to check blood levels. May need help from school districts and individuals to do screening.*

*It will be hard to satisfy everyone; everyone will want testing first. If testing, should look for other things (e.g., DDT, PCB).*

*People will say why didn't anyone warn us there was a problem. Have to be very careful when putting a notice on a property.*

*Commercial lenders often don't want any contamination left on property.*

*Reasonable measures would include everything from overarching planning strategies to homeowner actions. We can fix the home garden, landscaping, and create scenarios where we reduce runoff. There are multiple ways to protect ourselves.*

*Wonder is alternatives might be dispersion, capping, and public educations. I would think education would be a large part of this. Maybe with public education people can judge the situation and minimize the health risk.*

*One approach at a cleanup site was to dig a large trench, line it, and then fill it. Then there would be a deed restriction for that part of the problem. That approach was used until we found that while lead in top part of soil, the arsenic had leached down to 4 feet.*

*Deed restriction – has to be one of the options that remain for the other parties on the table. For the other options, soil mixing… it is expensive. The other options aren't really curing the problem, just putting a bandaid on it.*

**Other States/Countries That Have (or May Have Done) Related Work**

*Arizona DEQ – TCE in ground water, Tuscon 1985-90.*

*Michigan (processors, a lot of juice there), New York (tree fruits), California, Pennsylvania (The Horticulture Association or other growers' associations might be able to get contacts in those states).*

*Most of the work that has been done elsewhere addresses lead or arsenic but not both. Where the work looked at both contaminants, it was generally at a point source.*

*Government environmental agencies in Michigan, Ontario, and Massachusetts have asked about lead and/or arsenic soil contamination issues.*

*Maryland, Delaware, Berkeley, and Florida are doing related research on soils.*

*Montana mining sites, Idaho (Bunker Hill).*

*Phoenix – high levels of organic pesticides; developer built planned communities; companies did sampling; used technique of deep mixing.*

*Smelters in Kellogg, ID.*

*Suggested References*

*Proceedings of the Sixth International Conference on the Biogeochemistry of Trace Elements held in Guelph, Ontario, Canada, on July 29 - August 2, 2001. The 672 pages of these proceedings provide highly technical summaries of current research. The Conference Secretary was Kim Bolton of the University of Guelph. She should be able to provide information on the availability of the proceedings, which was published in both hardcopy and CD-rom format. Kim's email address is: <kim.bolton@sympatico.ca>.*

*Domy Adriano of the University of Georgia has just published a new book entitled "Trace Elements in the Terrestrial Environment" (2001, Springer-Verlag, New York, NY, 680 pp.). Domy has extensive research experience with heavy metals in the environment. His book does a good job of integrating the complex and extensive information base on the topic.*

*Pacific Rim Enterprise Center report on the cleanup of military sites.*

*EPA website has an extensive list of documents.*

*Sections of MTCA on owner & producer liability, RCW 70.105 d.040 3(c) and RCW 70.105 d.040 1(e).*